

PATENT
Serial No. 10/525,474
Amendment in Reply to Final Office Action mailed on March 29, 2006
Advisory Action mailed on May 24, 2006
and Petition Decision mailed on January 7, 2008

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A deep fat fryer including:

a frying pan;

a heating element for heating a cooking medium in the frying pan;

a temperature sensor circuit for sensing ~~the~~a temperature of the cooking medium in the frying pan and generating a temperature signal representing the sensed temperature in the frying pan;

a heater control for activating and deactivating the heating element; and

a control system operatively connected to the temperature sensor circuit and to the heater control, the control system being adapted

(1) for thermostatically activating the heating element in

response to a low temperature signal from the temperature sensor circuit representing ~~a~~the sensed temperature is at or below a lower limit value and deactivating the heating element in response to a high temperature signal from the temperature sensor circuit representing ~~a~~the sensed temperature is at or above an upper limit value; and (2) for generating a food lowering command signal commanding the lowering of food in response to ~~a~~the temperature signal from the temperature sensor circuit;

wherein the control system, while the heating element is active, is adapted for generating a first food lowering command signal for loading food in response to ~~a~~the temperature signal ~~from the temperature sensor circuit~~ representing a first predetermined sensed temperature below said upper limit value and for generating a second food lowering command signal for immersion of the food in the cooking liquid medium in response to ~~a~~the temperature signal ~~from the temperature sensor circuit~~ representing a second predetermined sensed temperature below said upper limit value but greater than said first predetermined sensed temperature; the control system being further adapted for generating the

food lowering command signal based on steepness of a temperature
rise over time of the temperature.

2. (Currently Amended) A-The deep fat fryer according to claim 1, wherein the control system is adapted for generating the food lowering command signal in response to a first occurrence of the temperature signal from the temperature sensor circuit representing a predetermined sensed temperature below said upper limit value after switching on of the fryer or after heating up the cooking medium from a temperature below a lowest possible frying temperature.

3. (Currently Amended) A-The deep fat fryer according to claim 1, further including a user interface operatively connected to the control system for setting a boost condition wherein, in which said boost condition, said upper limit value of the sensed temperature and said second predetermined sensed temperature below said upper limit value are temporarily increased.

PATENT
Serial No. 10/525,474
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4. (Currently Amended) A The deep fat fryer according to claim 3, wherein said control system is adapted for determining said temporarily increased upper value of the sensed temperature by adding a predetermined increase to said upper limit value of the sensed temperature.

5. (Currently Amended) A The deep fat fryer according to claim 4, wherein the control system is adapted for ending the boost condition in response to a temperature signal representing said increased upper limit value.

6. (Currently Amended) A The deep fat fryer according to claim 3, wherein the control system is adapted for ending the boost condition in response to expiry of a predetermined period of time after ~~the~~ start of the boost condition.

7. (Currently Amended) A The deep fat fryer according to claim 1, further comprising at least one signal generator adapted for generating a human perceptible food lowering command signal in

response to ~~a—the~~ food lowering command signal from the control system.

8. (Currently Amended) ~~A—The~~ deep fat fryer according to claim 7, further including a basket and a basket lift for lowering the basket into the cooking medium in the frying pan and lifting the basket out of the cooking medium, and adapted to lower the basket into the cooking medium in response to ~~a—the~~ food lowering command signal from the control system, the control system being adapted to generate the food lowering command signal causing ~~the~~ generation of the human perceptible signal before ~~the~~ generation of the food lowering command signal causing the basket lift to lower the basket into the cooking medium.

9. (New) A deep fryer including:

- a frying pan;
- a heating element for heating a cooking medium in the frying pan;
- a temperature sensor circuit for sensing a temperature of the

frying pan and generating a temperature signal representing the temperature; and

a controller configured to activate the heater when the temperature is below a lower limit and to deactivate the heating element the temperature is above an upper limit;

wherein the controller is configured to temporarily provide a boost to increase the upper limit to an increased value so that the heater remains activated when the temperature is above the upper limit and below the increased value for lowering food into the cooking medium.

10. (New) The deep fryer of claim 9, further comprising a basket configured to be lowered into the cooking medium in response to a food lowering command signal from the controller, the controller being further configured to generate the food lowering command signal when the temperature is above the upper limit and below the increased value.

11. (New) The deep fryer of claim 10, wherein the controller

PATENT
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and Petition Decision mailed on January 7, 2008

is further configured to generate a food loading command signal indicating to a user to load the food into the basket when the temperature is at or below the upper limit.

12. (New) The deep fryer of claim 9, further comprising a basket configured to be lowered into the cooking medium in response to a food lowering command signal from the controller, the controller being further configured to generate the food lowering command signal based on steepness of a temperature rise over time of the temperature.

13. (New) The deep fryer of claim 9, wherein the controller is further configured to remove the boost in response to expiry of a predetermined period of time after start of the boost.

14. (New) The deep fryer of claim 9, wherein the lower limit is equal to the upper limit and is set by a user.

15. (New) A fryer including:

a pan;
a heating element for heating a cooking medium in the pan;
a temperature sensor circuit for sensing a temperature of the pan and generating a temperature signal representing the temperature; and
a controller configured to activate the heater when the temperature is below a predetermined limit and to deactivate the heating element the temperature is above the predetermined limit;
wherein the controller is configured to temporarily provide a boost to increase the predetermined limit to an increased value so that the heater remains activated when the temperature is above the predetermined limit and below the increased value for initially introducing food into the cooking medium.

16. (New) The fryer of claim 15, further comprising a basket configured to be lowered into the cooking medium in response to a food lowering command signal from the controller, the controller being further configured to generate the food lowering command signal when the temperature is above the predetermined limit and

below the increased value.

17. (New) The fryer of claim 16, wherein the controller is further configured to generate a food loading command signal indicating to a user to load the food into the basket when the temperature is at or below the predetermined limit.

18. (New) The fryer of claim 15, further comprising a basket configured to be lowered into the cooking medium in response to a food lowering command signal from the controller, the controller being further configured to generate the food lowering command signal based on steepness of a temperature rise over time of the temperature.

19. (New) The deep fryer of claim 15, wherein the controller is further configured to remove the boost in response to expiry of a predetermined period of time after start of the boost.